

## Regina Maris CHANGE

By George Nichols

Tomorrow, continued cold, winds west to northwest, 15 to 25 knots, snow flurries ending by noon, clearing by evening, moderate freezing spray.

The forecast meant the fair breeze and relatively little sea I had been seeking for our winter run south to the Gulf Stream. However, I had sworn to myself I would never willingly find myself at sea under icing conditions. Stories of able ships rendered unmanageable by ice convinced me that no sensible person would go to sea in a square-rigger knowing he would encounter conditions where ice would form.

Yet, as I came out of the saloon that evening onto the snowy deck, I knew there was no choice but to go. The next reasonable chance to get our three-masted barkentine r/v Regina Maris south to the Caribbean to start her winter's work studying humpback whales at the southern end of their migratory path might not come for weeks. Besides, it

seemed unlikely the crew could be held together through more delays. Already early winter's cold, rain and snow had delayed the completion of our extensive re-fit and our departure from Boston for nearly a month. Then just when it looked as if we had managed to escape the icy grip of New England's worst winter in years by sailing in a 48-hour break between gales, an engine oil leak had sent us back to Newport for repairs.

A "nip with the skipper" and the announcement at supper that barring unforeseens, we would sail next morning brought a burst of enthusiasm and plans for last-minute preparations.

Wednesday, January 12, dawned overcast, cold (20°F), with only a few snow flurries coming in on the gentle west wind as the crew scurried to prepare to go.

The snow-rimmed harbor was bleak and empty as we motored out setting the fore-and-aft sails plus two square

Ice was still present at dawn, coating anything within reach of the freezing spray. By afternoon, as the ship neared the Gulf Stream it rapidly melted

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topsails as we went. Even the small group of friends and yard workers who assembled to see us off scattered to their cars quickly as we left. It was too cold to hang around

The 33 crewmembers who set off in Regina that morning were an odd mix but one that was already beginning to be molded together by shared experience. Three mates, a bosun, four volunteer deck hands, a cook, two scientists, a volunteer electronics technician, an engineer, my wife Ann as purser and I made up the "professionals" when we left Boston. The rest were students who had come from all over the USA (including two from Alaska) to help complete the re-fit and to deliver the ship to San Juan. They then would stay on for two months of combined humpback whale research and study in the Caribbean Basin. Four carpenters, who remained aboard to finish the trim on our handsome new accommodations, completed the complement. The crew had come to know each other and the ship well during the long cold weeks of hard work involved in completing her rearranged interior. Overall, many had offshore experience. Six had been members of the original crew that took the ship from Piraeus, Greece, to Boston (SAIL July 1976) and two others had been aboard for more than five months. Among the rest, offshore sailing experience was not unknown. Several had made transatlantic passages in small boats

Moreover, we knew, many of us from first-hand experience, that we had as sound and able a small sailing vessel under us as might be found. Gales in the Mediterranean, the Cabot Strait, and off southern Labrador had taught us how to handle the ship under such conditions and how comfortable and dry she could be in trying circumstances.

So we sailed out that day fully aware of our real ignor-



ance of what the winter North Atlantic could be like, yet confident that both we and the ship could cope with most things. A few quotes from the entries in my personal journal tell just what we experienced during the next 11 days.

Wednesday, January 12: "Passed Brenton's at noon. Everyone happy to be off despite building motion and bitter cold (12°F). Spray freezing on bow. Sea increasing as wind settles into NW motion with main and two staysails fairly active. Lots of crew seasick. Wind increasing to gale force by late PM. Luckily we run off. To go to weather would be murder tonight. Where water on deck is deeper, no ice, but spray freezes to wet slush or slightly firmer everywhere.

Thursday, January 13: "Noon position 38° 55' N/71° 33' W. 154 miles made good. The water warmed slowly overnight and eventually the wind decreased, but motion is still bad, 40° rolls, etc. Ice is still present at dawn but sun peeking out once in a while and decrease in west wind plus a move toward northwest cuts down rate of accumulation. Flange on #4 port fuel tank not properly seated and much fuel (how much?) is in bilge this AM. All day we run south with sail and power. Snow flurries blot the horizon and send the sea to smoking as water temperature slowly rises. Leaking flange repaired during PM. Everything smells better. With less motion crew is recovering. At 10 PM clearly warmer. Ice starting to melt fast. Water temp. check: 20° Centigrade. The Stream!"



I remembered the night of a bumpy June evening crossing the Gulf Stream in Gesture during the 1960 Bermuda Race when Aubrey Gould told me how his father had always insisted the Gulf Stream was a fine, comfortable place to go, a place toward which Nova Scotia trawlers headed to melt the winter ice when it began to build to dangerous proportions. Aubrey was complaining that his father didn't know what he was talking about. In the past I had always agreed with Aubrey but this January I changed my mind.

Our respite was short, however. Twenty-four hours later we were in the midst of our first Force 12 gale. My log records it as follows: *Friday, January 14:* "Noon Position 35° 55' N/70° 54' W. 180 miles made good. Smoother and smoother all night. This AM is balmy. Sea flat despite moderate SSW wind. Flat water says Stream sets us NE. Sights confirm.

"Forecast not so good: head winds and mounting sea. Meanwhile everyone is happy: Bill and Patty blow duets on penny whistles. This PM wind is definitely more and sea makes up. There is a major storm inshore and the glass falls steadily. Forecast is for less than we have already. Now at 2000 our speed is down to 2½ knots.

Mizzen and two outer jibs are off and sea mounts.

"Wind made and made and with it the sea, both from SW. By 2200 the ship labored in 15- to 18-foot seas broad on starboard bow. Wind increasing steadily too. Below rapidly becoming a shambles. Deck leaks all over. Stockholm tar in deck storage hatch has broken loose and leaks down through a seam onto the port main cabin table, bench and floor where it is transfering itself onto clothes, people, and everything else. The noise is deafening—every beam and plank creak as the ship plunges on under foretopmast staysail, main staysail and mainsail.

"Bilgewater a real problem. Fuel is leaking again and we are paying the price of sloppy clean up—sawdust, bits of wood and other gurry keep clogging the pumps so we have to use our trusty deckpump to keep up while we clear the suction. Meanwhile, the water sloshes up between the skin and ceiling each violent roll to wet down the bunks and in the two aft cabins to coat everything on the floor with fuel oil.

"On deck the combination of tar and fuel oil from the bilgepump coat the main deck with slippery goo. Cleats nailed to deck needed for footing near deckpump.



"Still the glass falls—now midnight—with increased tempo as wind and sea clearly increase rapidly.

"The mid-watch saw the climax. As sea and wind rose, so did the sound. The roar of breaking crests, the crash of waves against the hull, the drumming of bursts of rain on deck and house tops combined with the whistling of the wind in the rig to create a cacaphony—drowning out shouting voices, numbing the mind with its intensity. Although the details vary with the ship it is the voice of the gale—every gale has it and only those who have experienced it know its overwhelming power.

"In the saloon the quiet is almost eerie by contrast. Only the wild swings of the hanging lamp, the rapidly falling barometer and the occasional swash of a burst of heavy spray against the weather windows reminds one of the building gale outside.

"At 0030 the foretopmast staysail clew pulled out, ringing like a pistol shot as the bar-taut sailcloth finally yielded to the pressure. The inner jib was set in its place to steady her head. Meanwhile, with the engine kept at slow ahead to give a measure of extra control in case we are thrown into the trough, we still make two knots ahead and about the same off to leeward.

"At 0145 sail had to be reduced. The head first and then the rest of the main came in—slowly, as the watch struggled against the wind to get the inhauls, clewlines and brails hauled home.

"As sail came in Dennis slipped and fell over the main-deck lifeline, landing on his back and elbow. Unable to move, moaning with pain. Stretcher and body splint secured. Dennis rolled into splint and onto stretcher. Lashed down. Then lowered feet-first down main companionway. (Exam subsequently revealed no serious injury although Dennis was unable to work for the rest of the trip.)

Back to deck. Full Force 12 now. I write it in the log for

the first time in open sea without hesitation. The whole rig is humming like a giant harp in the wind which is impossible to face and seems to tear one's breath away. The sea is really wild. Crests rushing down on us yet never breaking aboard directly. *Regina* rolls madly but climbs every hill and slides easily down the next—never snaps a roll nor pounds on a pitch. The spray when she shoulders a crest aside flies vertically above and over the upper topsail yard—all clearly visible in the glow of the main spreader lights left on after handling the main—for comfort perhaps.

"Then as the furies mount and mount, the rig shrieks, the breaking crests rush roaring at us and each other. Suddenly one is aware it is less. A quick check shows the tumbling glass has reached its bottom at last. Indeed for the last half hour it has been steady. Rain has begun to fall—it is gentle and warm.

"From then on the wind and sea abate. The 0500 weather speaks of a severe gale center approaching ocean station vessel *Hotel* only 100 or so miles behind us. Clearly we too were in the track of that center."

Days which follow major gales have special features too. My journal says the following about Saturday, January 15: "This is a day of recovery for all. Recovery from fright, from fatigue, from wet clothes, from hunger. The sea is still high—10 to 15 feet at least—but the violence is gone and the ship runs on, rolling her main deck full once in a while as a sea breaks over a channel, but less and less as the brisk NW wind fills the inner jib, mainsail, mainstaysail and topsails set to steady her and give her speed.

"Biggest concerns are fuel leaks into the bilge and the rate at which bilgewater has been accumulating since we left Newport. Did we spring a seam? Pop some caulking? Or is this normal for the present level of motion? If fuel is getting out of the tanks, is water getting in?





The spray when she shoulders a crest aside flies vertically above and over the upper topsail yard and bubbles into the scuppers

If so, how much? Looking back we realize our only concern last night was 'what if we can't get rid of the bilgewater fast enough?'

"Meanwhile we mop, wipe, wring out, and pump by hand while we clear the mechanical pump once again . . ."

We did not learn until two weeks later the cause of our leak. Apparently we had lain against a pile broken off under the water during the blizzards in Newport which had chafed a hole nearly through the planking in one area under the port bilge amidships. Only the frame at the point of impact had saved us from developing a worse leak much sooner.

The resiliency of the human spirit and its ability to learn to cope with difficult, even frightening, circumstances is one of the wonders of mankind. Despite our problems the entry for Sunday, January 16, reads as follows: "Today things are back to normal. Clearing skies, less wind, lots less sea and the barometer is stable. Also we all just feel better. Dennis feels like getting up and his back checks out OK.

"Problem today is that the stove just won't get hot. Why? Wine with dinner helped restore happiness and loud tales of what happened during the gale went flying. No one seemed at all concerned that the barometer was falling, sea and wind were mounting, and the forecast spoke ominously of NW winds 35 knots and over."

As it turned out the lack of concern over the new "gale" was justified. Although sail had to be shortened in the mid-watch for a short period, by dawn the ship was flying along with the wind on a quarter under clear skies. Our only problems that day were mechanical. Water that had seeped into the fuel tanks made itself manifest by floating sludge remaining, after the tank cleaning, in the fuel intake systems for two out of three engines and the cook stove. Nevertheless, no one really

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cared. The sun was warm; the ship was making a steady six knots on the rhumb line for San Juan under a comforting cloud of sail. People joked and laughed as laundry lines blossomed all over the ship. It was a rare treat to enjoy the quiet of the sea free of any noise whatsoever. The sun and warmth convinced us all our troubles were over and tropic seas and gentle trade winds lay over the horizon. We just did not know that the trough developing off the Georgia coast would bring a gale which would spread snow, cold, and destruction from the Bahamas to Hatteras. Once again we were in the path of the storm.

It is curious and wonderful how the human mind softens perception as it transfers an event from the moment of happening to the storage bank of memory. Hurricanes become gales; gigantic seas, common waves; fear becomes concern; terror, mere anxiety. Looking back at Wednesday, January 19, all I remember now is a bad gale and the fatigue which followed. Once more the contemporary record tells a different story. Wednesday, January 19: "Today started with a brisk WSW breeze and a strange bumpy sea. Overcast made stars tough, but still a fix was made and by the time of our

regular radio-telephone call to the office all could be reported "in order" Sun was out and despite the rising wind everyone was full of cheer.

"Early PM-wind and sea rising rapidly-Force 8-9-10, seas 8-10-15-20 feet, the wind backing to SSW as it rises. All this fits well with the forecast of an approaching trough as does the steadily falling glass. But, if this is what the leading edge of the trough contains what will the other side be like where the cold front which follows is generating forecasts of 40 knot winds with higher gusts?

'Meanwhile the ship performs again. Sailed with mainsail and two staysails she is comfortably 60° off the wind and sea; with the engine turning 1000 rpm she

forereaches slowly at two or three knots.

'On days like this one gets a tremendous feeling of awe and admiration for the skill and knowledge this old ship represents—a distillate, an evolution of hundreds of ships, thousands of men's experience in fair weather and foul. She never pounds, never stops, rarely shudders, and treated right is always controllable. She rolls wildly but never gives the feeling she won't come back. She climbs every sea, shoulders aside every crest, and when she plunges down the backside of a sea headed for China, one never doubts that at the bottom of the



Under shortened sail the three-masted barkentine Regina Maris drives south

trough she will stop and turn her jib-boom skyward

again to start the next climb.

Mid-PM - We are back to Force 12 Seas 25-30 feet, wind 65 knots with higher gusts that howl in the rig and press the ship over despite the small area of the main staysail and inner jib - all we show now having handed the main at 1300 or so. The glass has steadied and even started to rise now - 1430

Suddenly clouds to weather coming very fast. The joyousness of the early afternoon disappears as the dark greenish-gray layer rushes across the sun. People, cameras, disappear-smiles too-something is about

to happen and it won't be nice.

Again the wind and sea build-fast now. Force 12-13-who knows? Seas 30-36 feet, winds 70 or more as rain begins. Then with a crash the full squall hits - 80 knots easy (the anemometer scale ends at 65)—like a white line squall without the thunder. The ship shudders and lies over yielding before the onslaught but the sails hold. The rain lessens the sea momentarily—or is it just that the violence of wind and rain make it small by contrast?

"In the pilot house a succession of helmsmen strugale with the wheel to keep her on course in relation to the seas. How remarkable our students are! No one, faced with a holocaust almost beyond imagination, with no experience trying to keep a ship in control under even ordinary gale conditions, no one hesitated to step forward for his or her trick at the wheel. No faces as I stood at their shoulder showed anything but excitement and determination.

"Then as suddenly as it came, the squall is gone. The sun is bright over the same wild scene as before. Ominous, though—the few wisps of clouds still are flying upwind over the bow, downwind, astern.

"Again at 1630 a bank of clouds—and another even more violent squall—hail this time and shrieking furies of wind. Again the wind hauls a bit and glass marches slowly but steadily up now. 'Good sign' you say, 'Can't last too long now!' How crazy!

'Sure, the rain lets up. The third squall somehow passes ahead but only to allow the wind and sea full

measure of freedom to increase and blow.

'Supper relaxed, despite all. Hot food and, despite the motion, a quiet comfort inside the ship where the tempest can hardly be heard.

"Then a long vigil. Hour after hour, more sea, more wind, more wind, more sea, all night as the glass slowly rises. Finally steadied at midnight. By 0300, 0400 wind is less and by dawn it is down to 25-30. Only the huge blue rollers coming from the west are left to remind us of the terrors of the storm.

Two days later we were alongside in San Juan.

What did we learn? Very simply that the north Atlantic in winter is no place to be in small boats if there is any way to avoid it. Freighters and passenger ships regularly make passages to Europe and southern ports during these months, but even they are not immune to problems. A 700-foot container ship, caught in the same gale 100 miles away sent out a distress call the night of January 19 because she had lost 29 containers off her deck, had stove in the #2 hatch, and was developing a 25° list to port. Her captain had doubts about her ability to survive in what he described as 50-foot seas and 100-knot winds. Had he foundered, his call would have been in vain. No one could have helped him in such weather. So, size is no sure route to safety. The Plimsoll marks on freighters have a special line marked WNA (winter North Atlantic) requiring ships to be loaded more lightly when setting out into these water. No other ocean has such an ominous distinction.